Separation of Flavonoids from *Aleurites moluccana* Leaves Using Chitosan **Modified with Heptaldehyde** Michele Morsch, Leury G. J. Girardi, Valdir Cechinel-Filho,

Christiane Meyre-Silva, and Clóvis Antonio Rodrigues* Núcleo de Investigações Químico-Farmacêuticas (NIQFAR), Curso de Farmácia/CCS, Universidade do Vale do Itajaí (UNIVALI), CEP 88.302-202, Itajaí, SC, Brasil.

Fax: 473417601. E-mail: clovis@ccs.univali.br

* Author for correspondence and reprint requests Z. Naturforsch. **59 c**, 649–652 (2004); received April 13/June 11, 2004 Heptaldehyde-modified chitosan (heptyl-chitosan, CH-Hp) was investigated as adsorbent for chromatographic separation of the flavonoids from A. moluccana. The amount of 2"-Orhamnosylswertisin isolated (30.0 mg) was approx. twice as high as swertisin (17.5 mg). The improved surface hydrophobicity effected by the heptyl groups promoted the separation of flavonoids. From the results obtained, CH-Hp seems to be more suitable for separation of glycosylated flavonoids than other flavonoids. Thus, modified chitosan described here can be

used for hydrophobic interaction chromatography as successfully illustrated with flavonoids. Key words: Chitosan-heptaldehyde, Chromatography, Swertisin, 2"-O-Rhamnosylswertisin